

200500029

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE; PRESENTS; SHALL COME;

Seminis Hegetable Seeds, Inc.

THE LEGIS, THERE HAS BEEN PRESENTED TO THE

## Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW. THEREPORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HERS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPUBLISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE VIGIT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR STING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PERPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, FIELD

'Black Velvet'

In Testimony Macross, I have hereunto set my hand and caused the seal of the Flant Anxiety Acotection Office to be affixed at the City of Washington, D.C. this nineteenth day of September, in the year two thousand and five.

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Commissioner Plant Variety Protection Office Agricultural Marketing Scruice Secretary of Agriculture

#### INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initiated and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

> **Plant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

#### ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;

evidence of uniformity and stability; and

- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
  - (1) identify these varieties and state all differences objectively:
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

US: First sale 4/23/04

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center .- East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/isg/seed.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

ST-470 (02-10-2003) designed by the Plant Variety Protection Office with Word 2000. Replaces former versions of ST-470, which are obsolete.

#### **EXHIBIT A**

### Origin and Breeding History of Black Velvet (08520643) Black Bean

Black Velvet (08520643) was developed at Seminis's Western Breeding Station (WBS), Filer, Idaho, by pedigree selection from a cross of Midnight, a Cornell Variety, and Blackhawk, from Michigan State University. The crossing and selections were made as follows:

- 2-1-95 Planted Midnight and Blackhawk in the greenhouse at WBS. Crosses made
- 6-95 Planted the F1 from above in the field at WBS. Allowed to self pollinate.
- 6-5-96 Planted F2 seeds in the field at WBS. Selected individual plants based on upright productive plants and desirable seed appearance.
- 10-2-96 Planted F3 seeds in the gh at WBS. Allowed to self pollinate.
- 1-29-97 Planted F4 seeds in the gh at WBS. Allowed to self pollinate.
- 6-9-97 Planted F5 in the field at WBS. Selected individual plants.
- 6-3-98 Planted F6 in the field at WBS under the number R98 22035 Selected this line for erect, indeterminate, productive plants with seed that is uniform in size and color. Observations during the growing season indicated the line was uniform and stable. All subsequent increases of Black Velvet trace to the bulk of R98 22035.
- 6-3-02 Space planted a stock of Black Velvet in the field at WBS. Harvested as 100 individual plant selections.
- 5-23-03 Planted 100 individual plant selections in the field at WBS as a progeny increase under the number RWV3420. Observations during the growing season confirmed Black Velvet is uniform and stable.

Selection criteria in the field represent a balance of characteristics related to productivity and quality and to goodness to fit for market needs such as erect indeterminate plant, seeds that are uniform in size and uniformly black in color, and with CO-2 based resistance to anthracnose, caused by *Colletotrichum lindemuthianum*.

Observations during the two (2) years of 1998 and 2003 confirm Black Velvet is uniform and stable within commercially acceptable limits. As is true with other dry bean varieties a small percentage of off-types can occur within commercially acceptable limits for almost any characteristic during the course of repeated multiplication. No variants are known to occur.

#### EXHIBIT B

Novelty Statement Concerning Black Velvet (08520643) Dry Bean

Black Velvet is an upright, indeterminate black bean variety. To our knowledge the black variety it most closely resembles is Midnight, developed by Cornell University. The comparative characteristic that best distinguishes the two includes, but may not be limited to, "CO-2" allele based resistance to the anthracnose fungus, Colletotrichum lindemuthianum. Midnight does not have the "CO-2" allele and is susceptible to the alpha race (race 17), whereas Black Velvet has the "CO-2" allele and is resistant to alpha.

#### U. S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK AND SEED DIVISION

# OBJECTIVE DESCRIPTION OF VARIETY Dry Edible Bean (Phaseolus vulgaris L.)

		<u> </u>
NAME OF APPLICANT(S)	EXPERIMENTAL NAME	VARIETY NAME
SEMINIS VEGETABLE SEEDS	08520643	Black Velvef
ADDRESS (Street and No. or R.F.D. No., City, State, ZIP)		FOR OFFICIAL USE ONLY
2700 CAMINO DEL SOL		EVPO NO.
OXNARD, CA 93030		200500029
Provide data for all characters unless indicated as "optional." Pl describe this variety. Measured data should be the mean of an a Society or any recognized color standard may be used to determ COLOR SYSTEM USED	uppropriate number of well spaced (1: nine plant color. Designate the color	5-20 cm) plants. The Royal Horticulture system used below.
! _	TION OF THE TEST(S) TO EVALUATE (Cr. I Pako	THIS VARIETY
1. MARKET CLASS 2. MATURIT		
CLASS 1 = Navy (Pea) 2 = Small White Aurora 3 = Black Midnight 4 = Pinto UI-114 5 = Great Northern UI-59 6 = Small Red NW-59 7 = Pink Viva 8 = Cranberry Ui-50 9 = Dark Red Kidney Montcalm 10 = Light Red Kidney Redkloud 11 = Yellow Eye Steuben 12 = Other (specify)	9 6 Days from planting to harvest Heat units from planting to har temperature used:	rvest maturity (optional). Specify base  maturity of check variety (use check
	to,	
3. PLANT HABIT		,
1 = Ia Bush-determinate, strong and erect stem and branches 2 = Ib Bush-determinate, weak stem and branches 3 = IIa Erect growth habit-indeterminate, guides (runners) short or not developed 4 = IIb Erect growth habit-indeterminate, guides medium to long, with no ability to climb 5 = IIIa Vine-indeterminate, short guides with no ability to climb 6 = IIIb Vine-indeterminate, long guides with ability to climb 7 = IVa Indeterminate climbing, pods distributed throughout the plant 8 = IVb Indeterminate climbing, pods concentrated on the upper part of the plant	0 5 0 Average height of control of the second of the secon	nature plant, in cm.  theck variety, in cm. (use same check as above Low (lower pods touching soil surface) High (lower pods not touching soil surface) Scattered (not concentrated high or low)  chine harvest: 1 = Adapted 2 = Not Adapte  1 = Good 2 = Fair 3 = Poor
4. LEAFLET MORPHOLOGY (Use terminal leaflet of a fully expanded tr	rifoliolate)	
	ossy; 3 = Semiglossy; 4 = Variable	
1 = Ovate 2 = Lanceolate	3 = Deltoid 4	= Cordate 5 = Rhomboid
1 = Acute 2 = Acuminate	3 = Cuspidate 4	= Obtuse
2 APEX OF LEAFLET:		
1 = Obtuse 2 = Oblique	3 = Cordate 4	= Cuneate 5 = Attenuate
3 BASE OF LEAFLET:		

5. FLOWER COLOR AND DAYS TO BLOOM	
COLOR OF STANDARD: 1 = White; 2 = Cream; 3 = Pink;  4 = Blue; 5 = Purple  5  COLOR OF KI	EEL: 1 = White; 2 = Cream; 3 = Pink; 4 = Blue; 5 = Purple
5 COLOR OF WINGS: 1 = White; 2 = Cream; 3 = Pink; 5 5 Days to 50% b	toom
6. POD MORPHOLOGY (Green pod morphology optional)	
Green Mature  COLOR PATTERN: 1 = Solid; 2 = Striped; 3 = Blotched; 4 = Mottled; 5 = Other	
3 FRIMARY 1 = Purple; 2 = Red; 3 = Green; 4 = Yellow; 5 = Tan; 6 = Brown; 7 = Oth	er
COLOR 1 = Light; 2 = Light Medium; 3 = Medium; 4 = Medium Dark; 5 = Dark	where the property of the pro
SECONDARY 1 = Purple; 2 = Red; 3 = Green; 4 = Yellow; 5 = Tan; 6 = Brown; 7 = Oth COLOR:	ner
1 CROSS SECTION 1 = Flat 2 = Pear 3 = Round 4 = Figure SHAPE:	Eight program of the second of
2 POD 1 = Straight 2 = Slightly Cu	rved
3 = Curved 4 = Recurved	
3 POD BEAK 1 = Straight 2 = Curved Upward 3 = Curved Dov	Averege beak length, in cm.
2 CONSTRICTIONS: 1 = None; 2 = Slight; 3 = Deep	
5 7 Average number of seeds per pod	in the Maria was a second of the second of t
7. SEED COLOR	
2 1 = Shiny; 2 = Dull; 3 = Semishiny; 4 = Variable 1 = Monochrome; 2	= Polychrome
1 0 col oc. 5 = Proving C = Pink: 7 = Red: 8 = Purple: COLOR: 5=	White; 2 = Yellow; 3 = Buff; 4 = Tan; Brown; 6 = Pink; 7 = Red; 8 = Purple; Blue; 10 = Black; 11 = Other
COLOR 1 = Solid; 2 = Splashed; 3 = Mottled; PATTERN: 4 = Striped; 5 = Flecked; 6 = Dotted  1 HILAR RING: 13	Absent; 2 = Present
HILAR RING COLOR: 1 = White; 2 = Yellow; 3 = Buff; 4 = Tan; 5 = Brown; 6 = Pink; 8 = Purple; 9 = Blue; 10 = Black; 11 = Other	
8. SEED SHAPE AND WEIGHT	•
SHAPE OF SEED TAKEN 1 = Round 2 = Oval 3 = Cuboid 4 = Kidney 5 = Tri Far	uncate stiglate
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9. ANTHOCYANIN	TIGMENTATION				
1 = ABSENT	2 Flowers	2 Stems	1 Pods	2 See	ds
2 = PRESENT	1 Leaves	1 Petioles	1 Peduncles	2 Noo	des
10. KNOWN DISEAS	REACTION				
William Color Colling	n common mosaic vi	leai spot, Bacteriai	Will Halo blight hi	ternue bliabe (	Pythium root rot, Rhizoctonia root rot, Pythiu Common bacterial blight, Red node virus, Pod ial brown spot, Bean southern mosaic virus,
REACTION: 1=	Susceptible; 2 = Resis	tant; 3 = Tolerant; 4	4 = Avoidance		
	(Give the common nam	e (CN), scientific name	e (SN), and race(s), w	here applicable)	
2 DISEASE:	CN Bean Commo	n Mosaic ; s	ν		; Race(s)
2 DISEASE:	cn Anthracnos	<u>e ; s</u> r	Colletotrich	um	; Race(s) alpha (17), gamma (55)
<del></del>					derta (23)
DISEASE:	CN	; sn	٠		; Race(s)
DISEASE:	CN	; sr	١		; Race(s)
DISEASE:	CN	; sn	٠	······································	; Race(s)
DISEASE:	CN	:: SA	· · · · · · · · · · · · · · · · · · ·		; Race(s)
PESTS - COMM Mexican bean bean bean bean bean bean bean be	NAMATODE RESISTA ON NAME: Aphids eetle, Root knot nen  Susceptible; 2 = Resis the common name (CN	Bean pod weevil, Enatode, Corn seed in tant; 3 = Tolerant;	naggot, Spider mites 4 = Avoidance	, Thrips, Weevi	a beetle, Leaf hopper, Lesion nematode, Lygus ils, Western bean cutworm, Other (specify)
<del></del>					otype
PEST: CN_		; sn	· · · · · · · · · · · · · · · · · · ·	; Bid	otype
PEST: CN_		; sn	<del>11-20-21-1</del>	; Bid	otype
1 = Susceptible; 2 3 = Tolerant; 4 =		eat Cold	Drought	Air Poll	ution
Other				, , , , , , , , , , , , , , , , , , ,	
3. COMMENTS	<del></del>		·		

REPRODUCE LOCALLY. Include form number and edition date on all	reproductions. F	ORM APPROVED - OMB No. 0581-0055	
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE  EXHIBIT E  STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).		
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME	
Seminis Vegetable Seeds, Inc.	XP 08520643	Black Velvet	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)	
2700 Camino del Sol Oxnard, CA 93030-7967	(805) 647-1572	(805) 918-2545	
	7. PVPO NUMBER 200	200500029	
8. Does the applicant own all rights to the variety? Mark an "X" in the	appropriate block. If no, please expla	n. YES NO	
9. Is the applicant (individual or company) a U.S. national or a U.S. b	ased company? If no, give name of co	ountry. YES NO	
10. Is the applicant the original owner? YES	NO If no, please answer <u>one</u>	of the following:	
a. If the original rights to variety were owned by individual(s), is (	are) the original owner(s) a U.S. Nationa  NO If no, give name of count		
b. If the original rights to variety were owned by a company(ies),	is (are) the original owner(s) a U.S. bas NO If no, give name of countr		
11. Additional explanation on ownership (Trace ownership from origin	nal breeder to current owner. Use the re	everse for extra space if needed):	
The variety named in this application was developed by the Semin otherwise stated, all rights to the varieties developed by Seminis Voperation of law. No rights to such invention, discovery or developed	Vegetable Seeds, Inc. are assigned to the	e Company by agreement or by	
Employee (Breeder): David Webster			
Site Location: Filer, ID			
PLEASE NOTE:			
Plant variety protection can only be afforded to the owners (not licens	ees) who meet the following criteria:		

- 1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

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